

Craft Demo Node JS Documentation by Dzhem Salimov

1) The idea

The idea of the homework is to fetch github information about a user, using GET (from CRUD commands) and to put some of the information into a freshdesk contact.

2) The realisation/additional ideas

- I used axios library as an easy way to fetching the information about the user using [https://api.github.com/users/\\${username}](https://api.github.com/users/${username})
- Take into consideration that you have to use your GITHUB_TOKEN/FRESHDESK_TOKEN from your account in order to make more requests and have a more secure/authorised reach [can be done in the .env file just copy and paste tokens]
- Making a Freshdesk account can easily be done or use some kind of example domain used in the documentation.
- I have done the program in such a way that first you CHECK if the contact already exists in Freshdesk, if it does, update its unique external id using PUT request to Freshdesk.com api with a random X digit number (I used 5 digit in my program, can be more), if it does not exist, create a new contact
- The contact is searched by the given email that you have created as `${domain}.freshdesk.com/api/v2/contacts?email=${username.toLowerCase()}@example.com` and it returns its ID that cannot be changed, if its null, it creates a new contact, if not, it updates the contacts unique external id
- when creating a contact the email is created as githubUser.login@example.com because when you fetch some users data from Github some of them do not have emails or names and they are assigned as null, thats why I use the login/username
- Moreover, additional functionalities can be added such as when creating a contact in Freshdesk, change the timezone, add another email to the user, examples are given in the documentation <https://developers.freshdesk.com/api/#contacts> at what information can be changed
- I used jest for unit testing, more tests can be added depending on the functions you have in the .js files
- The .env file for the tokens is read by default, if you want to add your own .env file remove the one that I have included and add it into VS code.

- We can add classes for every file so we encapsulate the functions and add more readability and further updates to the program
- For the try catch in index.js we can use it more strictly in a way that every function has a try catch so we can see where the actual error comes from and return an actual readable message for a basic user who doesn't have a technical background and want to see where the error is exactly

3) How to run the program

! Note that you will have to have Node JS installed already from terminal[can be from vs code]

>Download the CraftDemoNodeJs file and import it into VS code

>run [npm i] to install all the package modules, due to the fact that we are using libraries like axios, dotenv and etc.

>to run the test file you can simply use [npx jest]

>to run the program in the terminal write :

[node <filename><desired_github_user><desired_freshdesk_domain>]

if the contact exists in the domain, update its external id with a random 5 digit one [more functionalities can be added]

if the contact is null, create a new one with the given information from github [more functionalities can be added]

Running the test cases [npx jest] should look like this [more tests can be added]:

```
PASS test/get-freshdesk-user-id.test.js
  getFreshDeskUserId
    ✓ should return the user ID if a matching contact is found (2 ms)
    ✓ should return null if no matching contact is found

Test Suites: 1 passed, 1 total
Tests:       2 passed, 2 total
Snapshots:   0 total
Time:        0.151 s, estimated 1 s
Ran all test suites.
```

Example when running the actual program with :

[node src/index.js Gregory <desired_freshdesk_domain>]

```
{ login: 'gregory', name: 'Grégory Horion', email: null, id: 167488 }
Contact created successfully!
Contact Id: 1070000830126
```

Running the same command again :

```
{ login: 'gregory', name: 'Grégory Horion', email: null, id: 167488 }
FreshDesk user found with Id: 1070000830126. Updating information!
Contact's 'unique_external_id' updated successfully!
```